June 2006 Quarterly Groundwater and WDR Abbreviated Sampling Plan

Building 2, Former C-6 Facility Boeing Realty Corporation, Los Angeles, California

Table 1 presents the details of the quarterly groundwater and WDR groundwater monitoring program as required by the general Waste Discharge Requirements Order No. R4-2002-0030: Series 007. Monitoring wells will be gauged prior to collecting groundwater samples to determine static water levels and total well depth. For the WDR wells, low-flow purging to maintain uniform flow rates on the order of 0.1 to 0.5 liters/min will be used to collect groundwater samples and minimize disturbance to the groundwater in the well such that drawdown is less than 0.3 foot. Samples collected from each well will be tested for biogeochemical parameters using a YSI unit, field test kits, and fixed-base laboratory analyses. The YSI unit, with flow through cell, will be used to measure pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), Electrical Conductivity (EC), and temperature. Hach, Inc. field test kits will be used to measure ferrous iron (Fe [II]) and hydrogen sulfide for the WDR wells as shown on Table 1. Following field test kit analyses, all groundwater samples will be collected for analysis of volatile organic compounds (VOCs) by EPA Method 8260B. Samples from the WDR wells will also be analyzed for total sulfides by EPA Method 376.1 or approved equal. All other procedures, including quality assurance (QA) and data validation, will be as described in the 2006 Groundwater Monitoring Work Plan (CDM, January 31, 2006).



Table 1

June 2006 Quarterly and WDR Monitoring Program Former C-6 Facility Los Angeles, California

			Quarterly Groundwater and WDR Event Analytical Program June 2006				
Well ID	Water Bearing Unit	Sampling Order ¹	Water Level Gauging	VOCs	Total Sulfides	Field Parameters ²	Hydrogen Sulfide (Field Measurement)
Groundwater Monitoring Wells - WDR							
CMW001	C-Sand	1	Х	Х	Х	Х	X
CMW002	C-Sand	9	Х	X	х	х	X
CMW026	C-Sand	6	Х	Х	Х	Х	X
Bioremediation Monitoring Wells - WDR							
IRZB0081	B-Sand	8	Х	Х	Х	Х	Х
IRZB0095	B-Sand	12	Х	Х	х	Х	Х
IRZMW001A	B-Sand	23	Х	Х	х	Х	Х
IRZMW001B	B-Sand	13	Х	Х	х	Х	Х
IRZMW002A	B-Sand	21	Х	Х	Х	Х	Х
IRZMW002B	B-Sand	10	Х	Х	х	Х	Х
IRZMW003A	B-Sand	24	Х	Х	Х	Х	Х
IRZMW003B	B-Sand	14	Х	Х	Х	Х	Х
IRZMW004	B-Sand	18	Х	Х	х	Х	Х
IRZMW005	B-Sand	17	Х	Х	х	Х	Х
IRZCMW001	C-Sand	15	Х	Х	х	Х	Х
IRZCMW002	C-Sand	16	Х	Х	х	Х	Х
IRZCMW003	C-Sand	19	Х	Х	х	Х	Х
Quarterly Groundwater Monitoring for Wells installed in 2005 ³							
MWG003	Gage	5	Х	X		Х	
MWG004	Gage	2	Х	Х		х	
MWB003	B-Sand	20	Х	Х		х	
MWB006	B-Sand	22	Х	Х		х	
MWB027	B-Sand	11	Х	Х		Х	
MWB028	B-Sand	4	Х	Х		х	
MWC006	C-Sand	3	Х	Х		х	
MWC011	C-Sand	7	Х	Х		х	
Quality Control Samples							
Duplicates (1 per 20 wells) x (est. 2)							
Rinsate Blanks (1 per day)				x (est. 5)			
Field Blanks (1 per day)				x (est. 5)			
Decon Water (1 per day)				x (est. 5)			
Trip Blanks (1 per day)				x (est. 5)			

<u>Notes</u>

est. = Quality control sample number estimated based on estimated number of sampling days.

VOCs = Volatile organic compounds by EPA Method 8260B and Total Sulfides by EPA Method 376.1 or EQUAL

CDM

¹ Sampling order for June 2006 based on the results of the March 2006 quarterly event

² Field Parameters = pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), electrical conductivity (EC), temperature, ferrous iron, and hydrogen sulfide

³ Groundwater monitoring wells installed in 2005 will be sampled quarterly for four quarters starting September 2005.